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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/885,186	06/20/2001	Kimmo Kinnunen	413-010355-US(PAR)	4625
2512	7590	05/07/2004	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			FOX, BRYAN J	
			ART UNIT	PAPER NUMBER
			2686	8

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/885,186

Applicant(s)

KINNUNEN ET AL.

Examiner

Bryan J Fox

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-11,13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1,3-11,13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

Claims 1, 3-6, 15, 18, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior et al (EP000913977A2) in view of Takafumi (JP11284706).

Regarding claim 1, Prior, et al discloses a radiotelephone handset with a keypad 7, which reads on the claimed "keypad", a display 3, which reads on the claimed "display", a microphone 6, which reads on the claimed "microphone" and an earpiece 5, which reads on the claimed "speaker" all located on the front of the shell and together read on the claimed "first functional elements" (see figure 1). An on/off button 4 is located on the upper end of the shell and more keys are located on the side of the phone as can be seen in figure 2, which read on the claimed "second functional elements placed at the upper end of the shell or on the sides of the shell, which second functional elements comprise various function keys". In figure 3, it can be seen that keys 25 and 26 are located on the rear of the phone, which read on the claimed "third functional elements placed on the rear surface of the shell of the radio telephone". Prior, et al discloses in column 5, lines 34-35 and in figure six an alternative user interface on the rear of the handset, which reads on the claimed "second alternative user interface of a phone". Generally a function key operates independent from other keys and there is no indication that this alternative user interface relies on the interface on the front of the telephone, and so reads on the claimed "independent of the first functional elements". Prior et al fails to disclose a speaker and a microphone on the back of the telephone.

Takafumi discloses a portable telephone set with a speaker 4 and a microphone 6 placed on the opposite side of the display 2 and the operation section 3 (see "SOLUTION" section), which reads on the claimed "rear speaker and a rear microphone".

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Prior et al with Takafumi to include the above rear speaker and rear microphone in order to enhance the operability of a key operation section of the portable telephone set as suggested by Takafumi (see "PROBLEM TO BE SOLVED" section).

Regarding claim 3, the combination of Prior et al and Takafumi discloses in Prior column 1, lines 7-10 that important user interface considerations include the ease of which the phone can be transported (see Prior et al column 1, lines 7-10) and that the input means on the rear face of the handset, which reads on the claimed "third functional elements", promotes single handed operation (see Prior et al column 1, lines 30-31). It is clear that the phone is intended to be used while being carried in one hand, which reads on the claimed "carrying means".

Regarding claim 4 the combination of Prior et al and Takafumi discloses that a group may be selected by soft key 81 (see Prior et al column 7, lines 30-31), which reads on the claimed "group selector switch" and the soft key 81 is located on the rear of the phone (see Prior et al figure 8a), which reads on the claimed "third functional elements".

Regarding claim 5, the combination of Prior et al and Takafumi discloses an interface with actuable rolling means 111 which control the menu options on the display (see Prior et al figure 11 and column 9, lines 37-38), which reads on the claimed "rotary switch for selecting a group by turning the selector switch".

Regarding claim 6, the combination of Prior et al and Takafumi discloses that the soft key 81 can be depressed and as described above can be used to select a group (see Prior et al column 8, line 48), which reads on the claimed "pushbutton switch for selecting a group by pushing the selector switch".

Regarding claim 15, the combination of Prior et al and Takafumi discloses that the key 26 (see Prior et al figure 3) may have a dedicated function, such as a voice recognition function, which enables the user to store and retrieve data from the handset's memory (see Prior et al column 4, lines 54-57), which reads on the claimed "speech recognition button to use functions in the phone that can be controlled by the user's voice commands".

Regarding claim 18, in the combination of Prior et al and Takafumi, police may use the radiotelephone handset.

Regarding claim 19, in the combination of Prior et al and Takafumi, civilians may use the radiotelephone handset.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prior, et al in view of Takafumi as applied to claim 6 above, and further in view of Davidson, et al (US005841855A). The combination of Prior, et al and Takafumi fails to disclose a key to select a previous group.

Davidson, et al discloses a terminal with a back key 221 (see figure 3) and in column 4, lines 7-8 describes that its function is to allow a user to back up menu screen by menu screen, which reads on the claimed "pushing of the said group selector switch is arranged so as to select the previous selected group".

It would be obvious to one skilled in the art at the time of the invention to modify the combination of Prior, et al and Takafumi to include the back button in Davidson, et al in order to create a more user-friendly and intuitive interface.

Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Prior, et al in view of Takafumi as applied to claim 4 above, and further in view of Bannister, et al (2012199).

Regarding claims 8 and 9, the combination of Prior, et al and Takafumi fails to disclose a voice response function.

Bannister, et al discloses an audible voice signal which may be included in the presenting means on page 10, lines 20-21, which reads on the claimed "voice response function arranged in conjunction with the group selector switch to convey information to the user by means of a recorded voice message". Bannister, et al also discloses on page 10, line 1 that selection of a soft key in one menu can cause another menu to be

displayed. Each menu is a group and the soft key that selects the menu is a group selector switch. Bannister, et al further discloses on lines 24-26 that the message is relayed as each soft key is highlighted, which reads on the claimed "group name or index is given in the said recorded voice message".

It would be obvious to one skilled in the art at the time of the invention to modify the combination of Prior, et al and Takafumi with Bannister, et al to include the above message function in order to prevent the need for a user to divert his attention to a display when in a situation such as driving a car.

Regarding claim 10, the combination of Prior et al, Takafumi and Bannister, et al discloses that the function of the softkey is read off as it is highlighted, after which it may be selected and the new menu is displayed (see Bannister et al page 10, lines 24-26). Therefore, there must be a delay between the message and the transition to the group as claimed.

Regarding claim 11, the combination of Prior et al, Takafumi and Bannister, et al discloses that as each soft key is highlighted it can be read to the user by a voice synthesizer (see Bannister et al page 10, lines 24-26), so as each group, represented by a soft key, is selected, or highlighted, the voice synthesizer reads the name to confirm selection, as claimed.

Claims 13 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior, et al in view of Takafumi as applied to claim 1 above, and further in view of Gordon (US005884156A).

Regarding claim 13, the combination of Prior et al and Takafumi fails to disclose that the phone could function as a direct channel radio.

Gordon discloses in column 1, lines 7-8 that his device could provide communications in a telephony mode, which reads on the claimed "systems radio", and in a radio dispatch mode, which reads on the claimed "direct channel radio".

It would be obvious to one skilled in the art at the time of the invention to modify the combination of Prior et al and Takafumi to include the above radio dispatch mode disclosed by Gordon in order to eliminate the need for two separate devices and reuse some of the common circuitry.

Regarding claim 17, the combination of Prior et al and Takafumi fails to disclose a method to switch automatically between two speakers.

Gordon discloses a proximity sensor to determine when a user is near the first side of the housing and the operation of the first and second speaker is controlled accordingly (see column 1, lines 55-60), which reads on the claimed "automatic function for setting the voice messages to be automatically reproduced by the rear speaker when the phone is in carrying means and for setting the voice message to be reproduced by the speaker when the phone is not in the carrying means".

It would be obvious to one skilled in the art at the time of the invention to modify the above combination of Prior et al, Takafumi and Gordon to include the automatic function in order to eliminate the need for the user to manually switch between the two speakers.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Prior, et al in view of Takafumi as applied to claim 1 above, and further in view of Fishman (US005655017A). The combination of Prior, et al and Takafumi fails to disclose a selection switch to choose the speaker.

Fishman discloses a phone with a normal speaker 20 and an additional speaker 26 in the rear (see figure 1) and that a separate switch can be provided to turn the speakerphone on and off (see column 3, lines 49-51), which reads on the claimed "selection switch for setting the incoming voice messages to be reproduced by the speaker or the rear speaker".

It would be obvious to one skilled in the art at the time of the invention to modify the combination of Prior, et al and Takafumi with Fishman to include a switch to choose which speaker is used in order to allow a user to customize the unit to function according to his preferences.

Response to Arguments

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

Regarding the applicants argument of claim 1, Prior et al clearly discloses the use of an alternative user interface features on the rear of the handset (see column 5, lines 34-35). A button on a cellular phone is generally independent from the other buttons on the telephone and it is not disclosed that this alternative interface on the rear of the phone requires or depends upon feature on the front of the phone, so the

alternative user interface on the rear of the phone is independent from the user interface on the front of the telephone.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J Fox whose telephone number is (703) 305-8994. The examiner can normally be reached on Monday through Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (703) 305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BJF


5-3-2004

NGUYENT.VO
PRIMARY EXAMINER